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FAX TRANSMISSION

DATE:

February 9, 2006

PTO IDENTIFIER:

Application Number

10/535646-Conf. #9673

Patent Number

Inventor:

James FRASER et al.

MESSAGE TO:

US Patent and Trademark Office

FAX NUMBER:

(571) 279-8300

FROM:

LAHIVE & COCKFIELD, LLP

Anthony A. Laurentano

PHONE:

(617) 227-7400

Attorney Dkt. #:

BTW-094US

PAGES (Including Cover Sheet): 18

CONTENTS:

Request for Corrected Filing Receipt (2 Pages)

Certificate of Transmission (1 Page)

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Copy of Filing Receipt (3 Pages)

Copy of Application Data Sheet (4 Pages)

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Application No. (if known): 10/535646

Attorney Docket No.: BTW-094US

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on February 9, 2006

Date

Signature

Anthony A. Laurentano

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38,220 (617) 227-7400

Registration Number, if applicable

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Copy of Application Data Sheet (4 Pages)

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FEB 0 9 2006

Docket No.: BTW-094US

(PATENT)

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Dated: February 9, 2008

(Anthony A. Libur

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

James Fraser et al.

Application No.: 10/535646

Confirmation No.: 9673

Filed: May 20, 2005

Art Unit: 2873

For: WAVELENGTH LOCKER

Examiner: Not Yet Assigned

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicant hereby requests that a corrected Filing Receipt be issued in the aboveidentified patent application. The official Filing Receipt received by Applicant, a copy of which is attached hereto, has the following errors:

In the Applicant(s) section, please correct the order of applicants and their residences. The list of applicants should read as follows:

-- James FRASER, Torquay, United Kingdom; Stephen POPE, Towcester, United Kingdom; Kevin MULLANEY, Cogenhoe, United Kingdom; Herman GODFRIED Amsterdam, Netherlands; Evert HOUWMAN, Linden, Netherlands;--

Please see a copy of the originally filed Application Data Sheet enclosed.

In the Title section, please delete "comprising a diamond etalon." The correct title should read as follows:

-- Wavelength Locker --.

Please see a copy of the previously filed Preliminary Amendment enclosed.

Application No.: 10/535646

Group Art Unit: 2873

Docket No.: BTW-094US

Applicant additionally requests that all pertinent U.S. Patent and Trademark Office records relating to the subject application be changed to reflect this correction

Dated: February 9, 2006

Respectfully submitted,

Anthony A. Laurentano Registration No. 38,220

LAHIVE & COCKFIELD, LLP

28 State Street

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(617) 227-7400

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Attorney/Agent For Applicant







United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COLORSCIONER FOR PATENTS FO. SWI 140 AMERICA, Viginis 22313-1410

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/535,646	05/20/2005	2873	1280	BTW-094US	3	25	2

CONFIRMATION NO. 9673

959 LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109 FILING RECEIPT
OC000000017459298

Date Malled: 11/17/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filling Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1460. Please provide a copy of this Filling Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filling Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filling Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Herman Godfreid, Amsterdam, NETHERLANDS; Evert Houwman, Linden, NETHERLANDS; James Fraser, Devon; UNITED KINGDOM; Towcester Stephen Pope, Northampton, UNITED KINGDOM; Towcester Kevin Mullaney, Northampton, UNITED KINGDOM; Coservio &

Assignment For Published Patent Application

BOOKHAM TECHNOLOGY, PLC, TOWCESTER, UNITED KINGDOM

Power of Attorney: The patent practitioners associated with Customer Number 959.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/GB03/05000 11/18/2003

Foreign Applications

UNITED KINGDOM 0227144.3 11/21/2002

Projected Publication Date: 02/23/2008

Non-Publication Request: No

Early Publication Request: No

RECENTED
LAHIVE & COCKPIELD
DOCKET DEPT.

NOV 2 3 2005

RETRIEVED W//19

FORWARDED

Title

Wavelength locker comprising a diamend staten

Preliminary Class

359

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Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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Application Data Sheet

Application Information

Application Type:: Regular
Subject Matter:: Utility
Suggested Group Art Unit:: N/A
CD-ROM or CD-R?:: None
Sequence submission?:: None

Computer Readable Form (CRF)?:: No

Title:: WAVELENGTH LOCKER

Attorney Docket Number:: BTW-094US

Request for Early Publication?:: No Request for Non-Publication?:: No Small Entity?:: No Petition included?:: No Secrecy Order in Parent Appl.?:: No

Applicant Information

Applicant Authority Type:: Inventor

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Initle! 05/20/05

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Initial 05/20/05

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Postal or Zip Code of mailing address::

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Primary Citizenship Country::

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Country of mailing address::

Netherlands

Postal or Zip Code of mailing address::

NL-5439 NE

Correspondence Information

Correspondence Customer Number::

00959

Representative information

Representative Customer Number::

00959

Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	Continuation of	PCT/GB03/05000	11/18/03

Foreign Priority Information

Country::	Application number:	Filing Date::	Priority Claimed::
United Kingdom	0227144.3	11/22/02	Yes

Initial 05/20/05

Assignee information.

Assignee name::

BOOKHAM TECHNOLOGY, PLC

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City of mailing address:;

Towcester

Country of mailing address::

United Kingdom

Postal or Zip Code of mailing address::

NN12 8EQ

Ø 011/017

Docket No.: BTW-094US (PATENT)

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 563 886 630 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandris,

VA 22313-1460, on the date shown below.

Dated: 20 May 2005

IN THE UNITED STATES PATENT OFFICE AS DESIGNATED OFFICE (DO/US)

In re Patent Application of:

James Fraser et al.

International Application No.: PCT/GB2003/005000

International Filing Date: November 18, 2003

Application No.: NEW APPLICATION

Art Unit: N/A

Filed: CONCURRENTLY HEREWITH

Examiner: Not Yet Assigned

For: WAVELENGTH LOCKER (AS AMENDED)

FIRST PRELIMINARY AMENDMENT

MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

Application No.: NEW APPLICATION

Docket No.: BTW-094US

AMENDMENTS TO THE SPECIFICATION

In the Specification:

Please amend the title as follows:

WAVELENGTH LOCKER COMPRISING A DIAMOND ETALON

Page 1, line 2, after the title, please insert the following new paragraph:

Related Applications

This application is a 35 U.S.C. 371 national stage filing of International Application No. PCT/GB2003/005000, filed 18 November 2003, which claims priority to Great Britain Patent Application No. 0227144.3 filed on 21 November 2002 in Great Britain. The contents of the aforementioned applications are hereby incorporated by reference.

Page 1, after the Related Applications paragraph, insert the following title: "Background of the Invention"

Page 3, line 1 insert the following title: "Summary of the Invention"

Page 11, line 9 insert the following title: "Brief Description of the Drawings"

Page 11, line 19 insert the following title: "Description of Illustrated Embodiment"

Application No.: NEW APPLICATION

AMENDMENTS TO THE CLAIMS

Please cancel claims 2, 9 and 11, amend claims 3-8, 10, and 12-26, and add new claims 27 and 28.

- 1. (original) A wavelength locker for locking the wavelength of a light beam substantially to a predetermined wavelength, the wavelength locker comprising at least one Fabry-Perot etalon arranged to receive a sample portion of the light beam and to produce at least one output light beam therefrom, the intensity of which is dependent upon the wavelength of the sample light beam, wherein the Fabry-Perot etalon comprises diamond.
- 2. (canceled)
- 3. (currently amended) A wavelength locker according to Glaim 1, or a wavelength drift detector according to Claim 2, further comprising adjustment means, dependent upon the output of the etalon, for adjusting the wavelength of the light beam in order to reduce or eliminate its a drift from the predetermined wavelength.
- 4. (currently amended) A wavelength locker or drift detector-according to Claim claim 3, in which wherein the adjustment means comprise control electronics.
- 5. (currently amended) A wavelength locker or drift detector according to Claim 3 or Claim 4, in which wherein the adjustment means is arranged to control a light source that generates the light beam.
- 6. (currently amended) A wavelength locker or drift detector according to Claim claim 5, in which wherein the light source is remote from the wavelength locker or drift detector, and the adjustment means transmits a control signal to the light source to adjust the wavelength of the light beam.

Application No.: NEW APPLICATION

- 7. (currently amended) A wavelength locker or drift detector-according to Claim 5, in which wherein the light source comprises a part of the wavelength locker or drift detector.
- 8. (currently amended) A wavelength locker or drift detector according to any preceding claim 1, in which wherein the light beam comprises an optical signal, and the sample portion of the light beam comprises a sample portion of the optical signal.
- 9. (canceled)
- 10. (currently amended) A wavelength locker, drift detector or transmitter according to Claim claim 5 or any claim dependent thereon, in which wherein the light source comprises a laser.
- 11. (canceled)
- 12. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any preceding claim 1, in which wherein the diamond comprises a single crystal diamond.

::

- 13. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any preceding claim 1, in which wherein the diamond is a synthetic diamond.
- 14. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim 13, in which wherein the diamond has been formed by chemical vapour deposition.
- 15. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any preceding-claim 1, in which wherein the diamond is substantially free from defects.

Application No.: NEW APPLICATION

16. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any preceding claim 1, in which wherein the diamond etalon comprises a partially-reflective input face and an opposite partially-reflective output face, separated by a thickness of the etalon.

- 17. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim-claim 16, in which wherein the input and output faces are substantially flat and lie in substantially parallel planes.
- 18. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim 16 or Claim 17, in which wherein the input and output faces are polished.
- 19. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any one of claims claim 16 to 18, in which wherein the input face and/or the output face is/are free from any coating.
- 20. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any one of claims claim 16 to 19, in which wherein the thickness of the diamond etalon is at least 0.1 mm, preferably at least 0.2 mm, especially at least 0.5 mm.
- 21. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any one of claims claim 16 to 20, in which wherein the thickness of the diamond etalon is no greater than 5.0 mm, preferably no greater than 4.0 mm, especially no greater than 2.0 mm.
- 22. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim 20 or Claim 21, in which the diamond etalon has a thickness in the range 1.0 mm to 1.5 mm, preferably having a thickness of 1.25 mm.

Application No.: NEW APPLICATION

- 23. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any preceding claim 1, in which wherein the diamond etalon has transmitted and reflected wavelength dependent output characteristics, each of which has a free spectral range of 2X GHz, allowing wavelength locking points at spacings of both 2X GHz and X GHz.
- 24. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim claim 23, in which wherein wavelength locking points at spacings of X GHz are determined by a difference between the transmitted and reflected wavelength dependent output characteristics of the etalon.
- 25. (currently amended) A wavelength locker, drift detector, transmitter, or use according to Claim 24, in which wherein the amplitude of the difference between the transmitted and reflected wavelength dependent output characteristics of the etalon is preset such that the wavelength locking points are X GHz apart.
- 26. (currently amended) A wavelength locker, drift detector, transmitter, or use according to any one of claims claim 23 to 25, in which wherein X is 25.
- 27. (new) A wavelength drift detector for detecting the drift of the wavelength of a light beam from a predetermined wavelength, the wavelength drift detector comprising at least one Fabry-Perot etalon arranged to receive a sample portion of the light beam to produce at least one output light beam therefrom, the intensity of which is dependent upon the wavelength of the sample light beam, wherein the Fabry-Perot etalon comprises diamond.
- 28. (new) An optical signal transmitter comprising a wavelength locker according to claim 8, the optical signal transmitter including a light source which generates the optical signal.

Application No.: NEW APPLICATION Docket No.; BTW-094US

REMARKS

Preliminary to examination of this application, please amend the specification to amend the title, to add priority claim, and to insert section headings. Please cancel claims 2, 9 and 11, amend claims 3-8, 10, and 12-26, and add new claims 27 and 28 as set forth above. Applicants amend the claims to remove multiple dependencies, provide proper antecedent basis, and to address other matters of form. The foregoing amendments are not related to issues of patentability. Support for the amendments to the claims can be found throughout the specification, Figures and claims as originally filed.

Applicants respectfully submit that the foregoing amendments introduce no new matter.

Entry of the foregoing Preliminary Amendment is in order and requested.

If there are any questions regarding the proposed amendments to the application, we invite the Examiner to call Applicant's representative at the telephone number below.

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. BTW-094US from which the undersigned is authorized to draw.

Dated: 20 May 2005

Respectfully submitted,

Anthony A. Lauremano Registration No.: 38,220

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Attorney/Agent For Applicants